

AMENDMENT TO CLAIMS

1. (currently amended) In a cellulosic product in contact with a material containing moisture, an oil, grease, solvent or fat comprised of a cellulosic substrate having a polymer coating applied thereto which imparts a barrier properties against said moisture, oil, grease, solvent or fat contained in said material when in contact therewith, the improvement which comprises:

said polymer coating comprising an ethylene-vinyl acetate polymer comprised of crystalline ethylene segments prepared by aqueous emulsion ~~polymerizing~~ polymerization of ethylene and vinyl acetate in the presence of a stabilizing system consisting essentially of a surfactant or a protective colloid in combination with a surfactant, said ethylene-vinyl acetate polymer having:

(a) a crystalline melting point ranging from 35 to 110 °C measured at a heat rate of 20 °C per minute; and,

(b) a tensile storage modulus of at least 1×10^5 dynes/cm² at a temperature of 115 °C and measured at 6.28 rad/sec.

2. (original) The cellulosic product of claim 1 wherein the polymer is comprised of from 15 to 90% by weight of polymerized units of vinyl acetate and from about 10 to 85% by weight of polymerized units of ethylene based upon the total weight of the polymer.

3. (original) The cellulosic product of claim 2 wherein the polymer is comprised of from 25 to 80% by weight of polymerized units of vinyl acetate and from about 20 to 75% by weight of polymerized units of ethylene based upon the total weight of the polymer.

4. (original) The cellulosic product of claim 2 wherein the polymer is comprised of from 35 to 75% by weight of polymerized units of vinyl acetate and from about 25 to 65% by weight of polymerized units of ethylene based upon the total weight of the polymer.

5. (original) The cellulosic product of claim 4 wherein the polymer is comprised of from 30 to 50% by weight of polymerized units of vinyl acetate and from about 50 to 70% by weight of polymerized units of ethylene based upon the total weight of the polymer

6. (original) The cellulosic product of claim 2 wherein polymerized carboxylic acid or N-methylol acrylamide units are present in said polymer in an amount from about 0.2 to about 10% by weight of said polymer.

7. (original) The cellulosic product of claim 3 wherein said polymer has a tensile storage modulus of at least 2×10^5 dynes/cm² at 115 °C measured at 6.28 rad/sec.

8. (original) The cellulosic product of claim 7 wherein the polymer consists essentially of polymerized units of ethylene, vinyl acetate, and carboxylic acid.

9. (original) The cellulosic product of claim 8 wherein the crystalline heat of fusion of said polymer is from about 5 to 100 joules per gram as measured at a heat rate of 20 °C per minute.

10. (original) The cellulosic product of claim 9 wherein the glass transition temperature is from +25 °C to about -40 °C as measured at a heat rate of 20 °C per minute.

11. (original) The cellulosic product of claim 10 wherein crystalline thermal melting point ranges from 50 to 90 °C as measured at a heat rate of 20 °C per minute.

12. (original) The cellulosic product of claim 8 wherein the T_g of the polymer is from -25 to -35 °C.

13. (original) The cellulosic product of claim 12 wherein the crystalline heat of fusion ranges from preferably 15 to 70 joules per gram as measured at a heat rate of 20 °C per minute.

14. (currently amended) In a paper or paperboard product in contact with a food product and comprised of a paper or paperboard substrate having a polymer coating applied thereto which imparts a barrier properties to moisture, oil or fat contained in food product, the improvement which comprises:

said polymer coating comprising a polymer consisting essentially of polymerized units of ethylene, vinyl acetate, and carboxylic acid or N-methylol acrylamide, said polymer

prepared by aqueous emulsion ~~polymerizing~~ polymerization of ethylene, vinyl acetate and carboxylic acid or N-methylol acrylamide in the presence of a stabilizing system consisting essentially of a surfactant or a protective colloid in combination with a surfactant, said ethylene-vinyl acetate polymer having:

- (a) a crystalline melting point ranging from 50 to 90 °C measured at a heat rate of 20 °C per minute; and,
- (b) a tensile storage modulus of at least 1×10^5 dynes/cm² at a temperature of 115 °C and measured at 6.28 rad/sec.

15. (original) The paper or paperboard product of Claim 14 wherein the Tg of the polymer ranges from -25 to -35 °C.

16. (original) The paper or paperboard product of claim 15 wherein the heat of fusion of said polymer is from 10 to 70 joules per gram as measured at a heat rate of 20 °C per minute.

17. (original) The paper or paperboard product of claim 16 wherein the ethylene is present in an amount from 35 to 75 weight percent vinyl acetate, 25 to 65 weight percent ethylene, and from 0.2 to 10 percent by weight carboxylic acid or N-methylol acrylamide.

18. (original) The paper or paperboard product of claim 16 wherein the polymer consists essentially of ethylene, vinyl acetate, and carboxylic acid.